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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/804,785

03/13/2001

Russell E. Evans

259/225

2980

30764

7590

03/22/2005

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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/804,785	EVANS ET AL.	
	Examiner	Art Unit	
	Lee Fineman	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 32-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 December 2004 has been entered in which claims 1, 7, 32, 34, 39 and 42 were amended. Claims 1-12 and 32-42 are pending.

### ***Terminal Disclaimer***

2. The terminal disclaimers filed on 23 December 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,585,373 and 6,413,641 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 7, 11-12, 32-39 and 41 are rejected under 35 U.S.C. 102(e) as being Smith by U.S. Patent No. 6,096,425.

Regarding claims 1, 3-4, 32, 38-39 and 41, Smith discloses an optical-quality polarized part (fig. 1) comprising an optical construct (1, 2, 4 and 5) comprising a first layer (1 and 2) and a second layer (4 and 5), each layer comprised of a high impact polyurethane-based optical material (2 and 4, column 3, lines 22-23 and 34-36), and each layer having a bonding surface (fig. 1) and wherein the first layer has sufficient structural integrity to maintain optical power (column 3, lines 15-16), and; a polarizer (3), which is a wafer (fig. 1) comprising cellulose triacetate (column 3, lines 7-9), having a first side (next to 2) and an opposing side (next to 4) where in the first side and second side of the polarizer are integrally bonded to the bonding surfaces of the respective first and second layers of the optical construct across, in prescribed place thereon (fig. 1); and wherein the polarizer comprises at least one layer supporting a polyvinyl alcohol film (column 3, lines 7-9).

Regarding claim 5, Smith further discloses wherein the optical construct is a lens substrate (column 1, line 10 (sunglasses)).

Regarding claim 7, Smith further discloses wherein the optical construct further comprises a dye or colorant, a stabilizer, or a stiffener (column 5, lines 13-30).

Regarding claims 11 and 12, Smith further discloses comprising a hard coating (column 3, lines 16-18), wherein the hard coating is integrally bonded to the optical construct and therefore the sides of the polarizer within it.

Regarding claims 33 and 35, Smith further discloses wherein the polarizer is treated and bonded to the optical construct after the optical construct has been formed (column 4, lines 9-14).

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Regarding claim 34, Smith further discloses wherein the optical construct has a front surface and an opposing rear surface (fig. 1) and wherein the polarizer is bonded to the optical construct near the front surface (fig. 1).

Regarding claims 36 and 37, Smith further discloses wherein the polarizer has a thickness of less than 0.2 mm (column 3, lines 47-48).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Kausch et al., U.S. Patent No. 6,113,811.

Smith discloses the claimed invention except for the polarizer comprising a polyethylene terephthalate film. Kausch et al. teaches a polarizer comprising a polyethylene terephthalate film (column 10, lines 52-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the polarizer of Kausch in the optical-quality polarized part of Smith to reduce glare (Kausch, column 1, line 13).

7. Claims 6, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Slagel, US Patent No. 6,127,505.

Smith discloses the claimed invention except for wherein the high impact polyurethane-based optical material is comprising a polyurethane prepolymer, wherein the prepolymer comprises up to about 12 molar percent of trimethylol propane; and wherein the high impact polyurethane-based optical material comprises a reaction product of (a) a polyurethane prepolymer prepared by reaction of a methylenebis (cyclohexyl isocyanate) with an OH-containing intermediate having a weight average molecular weight between about 500 and about 1,200 selected from the group consisting of polyester glycols, polyether glycols, and mixtures thereof in an equivalent ratio of 2.5 to 4.0 NCO/1.0 OH and (b) an aromatic diamine curing agent in an equivalent ratio of about .9 to 1.1  $\text{NH}_2$ /1.0 NCO. Slagel teaches an optically clear high impact polyurethane-based optical material (column 2, lines 4-10) comprising a polyurethane prepolymer, wherein the prepolymer comprises up to about 12 molar percent of trimethylol propane (column 5, line 65-column 6 line 5), and wherein the high impact polyurethane-based optical material comprises a reaction product of (a) a polyurethane prepolymer prepared by reaction of a methylenebis (cyclohexyl isocyanate) with an OH-containing intermediate having a weight average molecular weight between about 500 and about 1,200 selected from the group consisting of polyester glycols, polyether glycols, and mixtures thereof in an equivalent ratio of 2.5 to 4.0 NCO/1.0 OH and (b) an aromatic diamine curing agent in an equivalent ratio of about .9 to 1.1  $\text{NH}_2$ /1.0 NCO (column 1, line 59-column 2, line 3 and column 3, lines 16-21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the polyurethane of Slagel in the optical construct of Smith to provide a optical product with high heat distortion temperatures and reduced cost (Slagel, column 2, lines 11-18).

*Response to Arguments*

8. Applicant's arguments filed 23 December 2004 have been fully considered but they are not persuasive.

Applicant argues that the Smith reference does not teach or suggest a first layer comprised of a high impact polyurethane-based optical material, and wherein the first layer has sufficient structural integrity to maintain optical power because “at a thickness of merely 0.1 mm, these adhesive film layers have **insufficient structural integrity to maintain optical powers**; they require the support provided by the adjacent plastic layers (1, 5)” (remarks page 8, lines 11-26). The examiner respectfully disagrees. The adhesive film is not identified as a distinct layer but in combination with the plastic to form the first layer (1 and 2) and the second layer (4 and 5) and these layers are detailed in the specification to provide structural support (see column 3, lines 15-16). The examiner would like to remind the applicant that the claims recite open-ended language and the Smith reference is appropriate as it includes a high impact polyurethane-based optical material in its first layer (1 and 2). Also, there is no special definition in the specification, e.g. a particular thickness, detailing what provides a specific structural integrity to maintain optical power, and more specifically of only a component of the polarized part versus the entire polarized part. In fact, difficulty in manufacturing the entire polarized part was detailed in the specification (see page 4, lines 6-13).

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF  
March 7, 2005

  
MARK A. ROBINSON  
PRIMARY EXAMINER